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(FILE 'CAPLUS' ENTERED AT 15:09:13 ON 26 FEB 2005) DEL HIS

FILE 'REGISTRY' ENTERED AT 15:13:29 ON 26 FEB 2005

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 12 S L1 FULL

FILE 'CAPLUS' ENTERED AT 15:14:11 ON 26 FEB 2005

L4 3 S L3

=> d que 14 stat L1 STR

Structure attributes must be viewed using STN Express query preparation.

L3 12 SEA FILE=REGISTRY SSS FUL L1

L4 3 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d 1-3 bib abs hitstr

10/813,122

Page 2

- L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2005:75790 CAPLUS
- DN 142:144381
- TI Colored curable compositions, color filters with good light, heat, and solvent resistance, and manufacture thereof
- IN Araki, Katsumi
- PA Fuji Photo Film Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 41 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2005024916	A2	20050127	JP 2003-190452	20030702
PRAI	JP 2003-190452		20030702		

AB The compns., showing wide development latitude, high resolution, and high transmittance, contain binders and colorants containing compds. of aggregation energy d. of ≥25.0 MPa1/2. Color filters with the title advantages are manufactured by application of the above compns. on supports followed by exposure via masks and development.

IT 778635-23-7 778635-25-9 778635-27-1

778635-29-3

RL: TEM (Technical or engineered material use); USES (Uses) (dyes; curable compns. containing dyes with high aggregation energy d. for color filters with good light, heat, and chemical resistance)

RN 778635-23-7 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]](cyclohexylmeth
 yl)amino]sulfonyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI)
 (CA INDEX NAME)

ACNH
$$\begin{array}{c|c} CH_2 & O \\ \hline & N \\ O & N \\ \hline & N \\ \hline & OH \\ \hline & SO_3H \\ \end{array}$$

Na

RN 778635-25-9 CAPLUS

Na

RN 778635-27-1 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]amino]sulfonyl] phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-29-3 CAPLUS

CN 2-Naphthalenesulfonic acid, 6-amino-5-[[2-[[[4-[[(butylamino)carbonyl]amino]phenyl]amino]sulfonyl]phenyl]azo]-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

● Na

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

applicant

AN 2004:904151 CAPLUS

DN 141:372906

TI Coloring material-containing curable compositions with good developability and heat and light resistance for color filters and their production method

IN Araki, Katsumi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2004300371	A2	20041028	JP 2003-97800	20030401
	US 2004260075	A1	20041223	US 2004-813622	20040331
PRAI	JP 2003-97799	Α	20030401		
	JP 2003-97800	Α	20030401		
OS	MARPAT 141:372906				
GI					

AΒ Title compns. comprise binders and azo compound colorants I, wherein R1 = C1-21 alkyl, aryl, aralkyl, alkylamino, aralkylamino, or arylamino, C1-10 perfluoroalkyl, C2-21 alkenyl, methacryloylamino, or ethoxycarbonylamino; R2 = single bond, CH2, CH2CH2, CH2CH2CH2, or CH2CH2CH2CH2; R3 = H, C1-21 alkyl or alkoxy, halogen atom, or OH; R4 = H, C1-21 alkyl, aryl, or aralkyl, or C2-21 alkenyl; R5 = H, cationic metal atom, nitrogen-containing cationic compound; m = 0-2 integer; and n = 0-4 integer. Thus, 9.4 parts a resist solution comprising propylene glycol monomethyl ether acetate 19.20, Et lactide 36.67, 41% allyl methacrylate-methacrylic acid copolymer solution 30.51, dipentaerythritol hexaacrylate 12.20, p-methoxyphenol 0.0061, F 475 fluorosurfactant 0.83, and 2-(o-benzoyloxim)-1-[4-(phenylthio)phenyl]-1,2octanedione 0.586 parts and 0.6 parts azo compound were mixed, applied on a primer-coated glass substrate, prebaked at 120° for 120 s, irradiated through a mask, developed, and washed to give a test piece with good developability and heat and light resistance.

IT 778635-23-7 778635-25-9 778635-27-1

778635-29-3 778635-31-7

RL: MOA (Modifier or additive use); USES (Uses)

(colorant; coloring material-containing curable compns. with good developability and heat and light resistance for color filters)

RN 778635-23-7 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]](cyclohexylmeth
 yl)amino]sulfonyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI)
 (CA INDEX NAME)

Na

RN 778635-25-9 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]ethylamino]sulf onyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-27-1 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]amino]sulfonyl] phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-29-3 CAPLUS

CN 2-Naphthalenesulfonic acid, 6-amino-5-[[2-[[[4-[[(butylamino)carbonyl]amino]phenyl]amino]sulfonyl]phenyl]azo]-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-31-7 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]hexylamino]sulf onyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

● Na

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L4
        ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
        1970:404952 CAPLUS
ΑN
DN
        73:4952
TI
        Polymerizable dyes
IN
        Booth, Gerald; Tinker, Barrie; Parsons, Brian N.
PΑ
        Imperial Chemical Industries Ltd.
SO
        Ger. Offen., 75 pp.
        CODEN: GWXXBX
DT
        Patent
        German
LA
FAN.CNT 1
        PATENT NO. KIND
                                                      DATE APPLICATION NO.
                                                                                                                  DATE
       DE 1919588

GB 1252453

A 19711103

GB 1968-18101

BE 731683

NL 6905927

FR 2006386

A5 19691226

GB 1968-18101

A 19680417

GB 1968-18110

A 19680417

Dress containing CVS
ΡI
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PRAI GB 1968-18101
                                                 19680417
AΒ
        Dyes containing CH2:CRCONH groups (R = H, Me), useful for dyeing cellulose and
        natural and synthetic polyamide fibers fast shades, were prepared Thus, a
        solution of 4.6 parts 2.4-(CH2:CHCONH)2C6H3NH2 (I) in a mixture of 250 parts
        H2O and 60 parts Me2CO was added with stirring at 10° to a
        suspension of CuPc(SO2Cl)3 (Pc = phthalocyanine) (prepared from 5.8 parts
        CuPc in 150 parts H2O while adding aqueous Na2CO3 to maintain Ph 7), stirred
        for 2 hr, treated with 4.2 parts NaHCO3, stirred for 10 hr, treated with 2
        parts pyridine, stirred for 24 hr, adjusted to pH 2 with HCl, and salted
        to give a turquoise blue dye for wool and cotton. Similarly, other dyes
        were prepared (reactants and shade given): 1-amino-4-(3-
        sulfoanilino)anthraquinone-2-sulfonyl chloride, I, blue on wool;
        1-amino-4-[3-[3,4-bis(acryloylamino)anilinosulfonyl]anilino]anthraquinone-
        2-sulfonic acid, Me2SO4, blue on wool; 3-H2NC6H4NHCONHC6H3(NHCOCMe:CH2)2
        (m. 193-5^{\circ}) \rightarrow 1-(4-sulfophenyl)-3-methyl-5-pyrazolone,
        yellow on wool; 1-amino-4-bromoanthraquinone-2-sulfonic acid (II),
        3,4-(CH2:CMeCONH)2C6H3NH2 (III) (m. 154°), blue on wool;
        1-(\beta-\text{sulfatoethylamino})-4-\text{bromoanthraquinone}, III, blue on wool and
        nylon; II, 3,4-(CH2:CMeCONH)2C6H3NHCH2C6H4NH2-3 m. 136°), blue on
        wool and nylon; 3,4-(CH2:CMeCONHC6H3NHSO2C6H4NH2-2 (m. 160-1°)
        → 2,8,6-H2N(HO)C10H5SO3H, bluish red on wool and nylon;
        3,4-(CH2:CMeCONH)2C6H3NHSO2C6H4NH2-3 (m. 214-16^{\circ} \rightarrow 1-(2,5-1)
        dichloro-4-sulfophenyl)-3-methyl-5-pyrazolone, greenish yellow on wool and
        nylon; 2,5,4-Cl2(H2N)C6-H2SO2NHC6H3(NHCOCH:CH2)2-2,4 [m. 266°
        (decomposition) \rightarrow 3-MeC6H4N(CH2CH2OH)2, red on polyamide;
        1-(4,6-dichloro-s-triazin-2-ylamino)-7-(2-sulfophenylazo)-8-naphthol-3,6-
        disulfonic acid, I, reddish blue on cellulose; 2-chloro-4-(3-amino-4-
        sulfoanilino)-6-[3,4-bis(acryloylamino)anilino]-s-triazine →
        1,8,3,6-AcNH(HO)C10H4(SO3H)2, bluish red on cellulose, I, Cu complex of
        1-(4,6-dichloro-s-triazin-2-ylamino)-7-(5-chloro-6-hydroxy-3-
        sulfophenylazo)-2-hydroxy-3,6-naphthalenedisulfonic acid, purple on
        cellulose; I, cyanuric chloride, 1-amino-4-(3-sulfo-4-
        aminoanilino)anthraquinone-2-sulfonic acid, blue on cellulose; II,
        3,4-(CH2:CMeCONH)2C6H3NHSO2C6H4NH2-3, reddish blue on wool and nylon. The
        following intermediates were also prepared: 3,4-(CH2:CHCONH)2C6H3X (IV, X =
        NO2), m. 203°; IV (X = NHAc), 199-201°; IV (X = NH2), m. 234°; 3,4-(CH2:CMeCONH)2C6H3X (V, X = NO2), m. 164° V (X = NO2), m. 164° V (X
        NHCONHC6H4NO2-3), m. 238-9°; 3,4-CH2:CHCONH(CH2:CHCONMe)C6H3X (VI,
        X = NH2, m. 158-60°; VI (X = NO2), m. 206°;
        3,4-CH2:CMeCONH(CH2:CHCONH)C6H3X (VII, X = NH2), m. 185-7°; VII (X
        = NO2), m. 182-4°; 6-amino-1,4-diacryloyl-1,2,3,4-
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tetrahydroquinoxaline, m 176°; 6-nitro-1.4-diacryloyl-1,2,3,4-

tetrahydroquinoxaline. m. 122° (MeOH); 3,4-

Na

=> => d que 16 stat

L5 57 SEA FILE=CAPLUS ABB=ON PLU=ON "ARAKI KATSUMI"/AU L6 1 SEA FILE=CAPLUS ABB=ON PLU=ON L5 AND AZO

=> d bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:904151 CAPLUS

DN 141:372906

TI Coloring material-containing curable compositions with good developability and heat and light resistance for color filters and their production method

IN Araki, Katsumi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

FAN. CNT I						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 2004300371	A2	20041028	JP 2003-97800	20030401	
	US 2004260075	A1	20041223	US 2004-813622	20040331	
PRAI	JP 2003-97799	Α	20030401			
	JP 2003-97800	Α	20030401			
OS	MARPAT 141:372906					
GI						

Title compns. comprise binders and azo compound colorants I, AΒ wherein R1 = C1-21 alkyl, aryl, aralkyl, alkylamino, aralkylamino, or arylamino, C1-10 perfluoroalkyl, C2-21 alkenyl, methacryloylamino, or ethoxycarbonylamino; R2 = single bond, CH2, CH2CH2, CH2CH2CH2, or CH2CH2CH2CH2; R3 = H, C1-21 alkyl or alkoxy, halogen atom, or OH; R4 = H, C1-21 alkyl, aryl, or aralkyl, or C2-21 alkenyl; R5 = H, cationic metal atom, nitrogen-containing cationic compound; m = 0-2 integer; and n = 0-4integer. Thus, 9.4 parts a resist solution comprising propylene glycol monomethyl ether acetate 19.20, Et lactide 36.67, 41% allyl methacrylate-methacrylic acid copolymer solution 30.51, dipentaerythritol hexaacrylate 12.20, p-methoxyphenol 0.0061, F 475 fluorosurfactant 0.83, and 2-(o-benzoyloxim)-1-[4-(phenylthio)phenyl]-1,2-octanedione 0.586 parts and 0.6 parts azo compound were mixed, applied on a primer-coated glass substrate, prebaked at 120° for 120 s, irradiated through a mask, developed, and washed to give a test piece with good developability and heat and light resistance.